

1 CLAIMS.

2 We claim:

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4 1. A laminated deck for a skateboard, the deck comprising:

5 a plurality of layers of graphite cloth and a plurality of  
6 layers of a laminating resin, the layers of graphite cloth being  
7 interspersed between the layers of the laminating resin; and  
8 subjected to a combination of heat and vacuum for a time sufficient  
9 for the laminating resin to cure.

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11 2. The skateboard deck as described in claim 1, wherein each layer  
12 of the graphite cloth is positioned at an angle between zero  
13 degrees and approximately 180 degrees with respect to the previous  
14 layer of the graphite cloth.

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16 3. The skateboard deck as described in claim 2, wherein each layer  
17 of the graphite cloth is positioned at an angle between zero  
18 degrees and approximately 90 degrees with respect to the previous  
19 layer of the graphite cloth.

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21 4. The skateboard deck as described in claim 1, further comprising  
22 an additional layer, the additional layer comprising fiberglass and  
23 the laminating resin, the additional layer being the deck bottom.

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25 5. The skateboard deck as described in claim 1, wherein the number  
26 of layers of the skateboard deck is determined according to the  
27 weight of an end user, and conditions under which the skateboard  
28 deck will be used.

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30 6. The skateboard deck as described in claim 5, wherein the  
31 determination is based on a singularity function.

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33 7. The skateboard deck as described in claim 4, further comprising  
34 a standoff, the standoff comprising a plurality of layers of  
35 graphite cloth and a plurality of layers of a laminating resin, the

1 layers of graphite cloth being interspersed between the layers of  
2 the laminating resin, the standoff being attached to the deck  
3 bottom.

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5 8. The skateboard deck as described in claim 7, wherein the deck  
6 has a length that ranges from approximately 18 inches to  
7 approximately 48 inches.

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9 9. A method for manufacturing a skateboard deck, the method  
10 comprising the steps of:

11 forming a first layer of graphite cloth by taking a piece of  
12 graphite cloth, and applying a layer of laminating resin thereto;

13 adding a second layer of the graphite cloth and the laminating  
14 resin to the first layer, the second layer formed similarly to the  
15 first layer;

16 repeating the steps of forming and adding until a desired  
17 number of layers are used, forming a desired thickness;

18 inserting the desired thickness of graphite layers into a  
19 mold; and

20 subjecting the mold to a combination of heat and vacuum for a  
21 time sufficient for the laminating resin to cure and manufacture  
22 the skateboard deck.

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24 10. The method as described in claim 9, wherein the heat is a  
25 temperature ranging from approximately 75 degrees F. to  
26 approximately 85 degrees F.

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28 11. The method as described in claim 9, wherein the vacuum applied  
29 ranges from approximately 90 psi to approximately 125 psi.

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31 12. The method as described in claim 10, wherein the deck is cured  
32 for between approximately one-half to two hours.

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34 13. The method as described in claim 10, wherein the deck further  
35 comprises an additional layer, the additional layer comprising

1 fiberglass and the laminating resin, the additional layer being the  
2 deck bottom.

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4 14. The method as described in claim 9, further comprising the  
5 step of determining the number of layers of the deck according to  
6 the weight of an end user, and conditions under which the  
7 skateboard deck will be used.

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9 15. The method as described in claim 14, wherein the determining  
10 step uses a singularity function.

11  
12 16. A method for manufacturing a skateboard deck, the method  
13 comprising the steps of:

14 forming a first layer of graphite cloth by taking a piece of  
15 graphite cloth, the graphite cloth comprising graphite cloth fiber  
16 and a laminating resin therein;

17 applying a second layer of the graphite cloth to the first  
18 layer;

19 repeating the steps of forming and applying until a desired  
20 number of layers are used, forming a desired thickness;

21 inserting the desired thickness of graphite layers into a  
22 mold; and

23 subjecting the mold to a combination of heat and vacuum for a  
24 time sufficient for the laminating resin to cure and manufacture  
25 the skateboard deck.

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27 17. The method as described in claim 16, wherein the heat is a  
28 temperature ranging from approximately 200 degrees F. to  
29 approximately 600 degrees F.

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31 18. The method as described in claim 17, wherein the heat is a  
32 temperature ranging from approximately 250 degrees F. to  
33 approximately 300 degrees F.

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35 19. The method as described in claim 18, wherein the heat is a

1 temperature of approximately 250 degrees F.

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3 20. The method as described in claim 16, wherein the vacuum is  
4 between approximately 20 - 50 psi.

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6 21. The method as described in claim 16, wherein the deck is cured  
7 for between approximately one and approximately 4 hours.

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9 22. The method as described in claim 21, wherein the deck is cured  
10 for between approximately two and approximately 3 hours.

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12 23. The method as described in claim 22, wherein the deck is cured  
13 for between approximately two and one-half hours.

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15 24. The method as described in claim 17, wherein the deck further  
16 comprises an additional layer, the additional layer comprising  
17 fiberglass and the laminating resin, the additional layer being the  
18 deck bottom.

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20 25. The method as described in claim 17, further comprising the  
21 step of determining the number of layers of the deck according to  
22 the weight of an end user, and to the conditions under which the  
23 deck will be used.

24  
25 26. The method as described in claim 25, wherein the determining  
26 step uses a singularity function.

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28 27. A laminated deck for a wheeled device, the deck comprising:  
29 a plurality of layers of graphite cloth and a plurality of  
30 layers of a laminating resin, the layers of the graphite cloth and  
31 the laminating resin being distributed in an alternating manner;  
32 and subjected to a combination of heat and vacuum for a time  
33 sufficient for the laminating resin to cure.

34  
35 28. The laminated deck as described in claim 27, further

1 comprising an additional layer, the additional layer comprising  
2 fiberglass and the laminating resin, the additional layer being the  
3 deck bottom.

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5 29. The deck as described in claim 28, wherein the wheeled device  
6 is a skateboard.

7  
8 30. A deck for a skateboard, the deck comprising a plurality of  
9 layers of graphite cloth, the graphite cloth comprising graphite  
10 fiber and a laminating resin therein, the plurality of layers of  
11 graphite cloth being subjected to a temperature ranging from  
12 approximately 75 degrees F. to approximately 85 degrees F., a  
13 vacuum ranging from approximately 90 -125 psi, for a period ranging  
14 between approximately one-half hour and approximately two hours.

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16 31. The skateboard deck as described in claim 30, further  
17 comprising a standoff, the standoff comprising graphite fiber and  
18 a laminating resin therein, the plurality of layers of graphite  
19 cloth being subjected to a temperature ranging from approximately  
20 75 degrees F. to approximately 85 degrees F., a vacuum ranging from  
21 approximately 90 -125 psi, for a period ranging between  
22 approximately one-half hour and approximately two hours.

23  
24 32. A deck for a skateboard, the deck comprising a plurality of  
25 layers of graphite cloth, the graphite cloth comprising graphite  
26 fiber and a laminating resin therein, the plurality of layers of  
27 graphite cloth being positioned in a mold, and subjecting the mold  
28 to a temperature ranging from approximately 200 degrees F. to  
29 approximately 600 degrees F., a vacuum ranging from approximately  
30 20 -50 psi, for a period ranging between approximately one and  
31 approximately 4 hours.

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33 33. The skateboard deck as described in claim 32, further  
34 comprising a standoff, the standoff comprising graphite fiber and  
35 a laminating resin therein, the plurality of layers of graphite

1 cloth being positioned in a mold, and subjecting the mold to a  
2 temperature ranging from approximately 200 degrees F. to  
3 approximately 600 degrees F., a vacuum ranging from approximately  
4 20 -50 psi, for a period ranging between approximately one and  
5 approximately 4 hours.

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